

## EXPLANATION OF PLATES IX. AND X.

## PLATE IX. B.

- Fig. 1. *Closterium acerosum*: *o o*, vesicles containing granules in constant motion; *s' s'' s'''*, minute thin cords, which I saw change in relative position; *d d*, glands; *m*, aperture (mouth); *r r*, apertures which occur in some other species of *Closteria*, and from which Ehrenberg saw minute feet project.
- Fig. 2. *Stylonychia pustulata*: *m*, mouth; *b*, contractile bladder; *f*, rigid bristles, moveable upon their bases.
- Fig. 3. *Vorticella nebulifera*: *b*, contractile vesicle; *z*, gastric cells; *s*, muscular sheath; *m*, muscle; *v v*, elongations of the muscle; *f*, attachment in the muscular sheath.
- Fig. 4. *Paramecium stomioptycha*: *a a a*, fibres which form a circle around the oral aperture; *z*, its minute appendix; *d*, gland; *s*, contractile vesicle with its appendages.
- Fig. 5. A *Vorticella*: *m*, mouth; *s*, general alimentary canal (œsophagus); *z*, gastric cells; *i i*, their hollow peduncles; *a*, anus.
- Fig. 6. *Epistylis grandis*: *m*, mouth; *i i*, gastric cells, which I saw filled, without having seen the nutritious matter pass the apparent extremity *r* of the œsophagus; *z*, filled gastric cells in connexion with the general alimentary canal.

## PLATE X.

- Fig. 7. *Stentor cœruleus*: *b*, vesicle; *k*, germ; *d*, gland.
- Figs. 8—14. Stages of the development of the globular body observed in its interior.
- Fig. 15. *Stentor polymorphus*: *b*, contractile vesicle; *d*, gland; *e*, germ, as described under *St. cœruleus*.

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 XLVII.—Descriptions of three newly-discovered British species of Coleoptera. By T. VERNON WOLLASTON, B.A., F.C.P.S.

[With a Plate.]

## Section NECROPHAGA.

## Fam. MYCETOPHAGIDÆ, Westwood.

Genus *Atomaria*, Kirby.

1. *Atomaria pallida*. Oblonga, pubescens, corpore toto, oculis nigris antennisque testaceis exceptis, pallido-testaceo. Pl. IX. fig. 1.

Corp. long. lin.  $\frac{5}{8}$ . Depressed, thickly punctured, slightly shining and pubescent. The entire insect of a uniform pale testaceous hue, with the exception of the antennæ, which are slightly darker, and the eyes which are black. Thorax broad; antennæ long and robust, the three apical joints large, forming a club, the terminal one slightly paler than the rest.

Taken at Fulbourn near Cambridge. Three specimens are in my own cabinet, and one or two more in the possession of the Rev. Hamlet Clark of Northampton.

## Section PHILHYDRIDA.

Fam. ANISOTOMIDÆ, Stephens.

Genus *Ephistemus*, Westwood.

2. *Ephistemus palustris*. Niger, nitidus, subpubescens, thorace interdum piceo, antennis pedibusque testaceis. Pl. IX. fig. 2.

Corp. long. lin.  $\frac{7}{10}$ . Oblong-ovate, very convex, pitchy-black, shining, minutely and sparingly punctured, most obscurely pubescent. Thorax large and sometimes piceous. Legs pale testaceous. Antennæ somewhat darker, thick, with the club robust.

I possess three specimens of this very distinct species (which is at once recognised from the rest by its larger size) taken, each on different occasions, in the marshes near Cambridge. Concluding it therefore to be a fen insect, I have selected the specific name "*palustris*" as most appropriate.

## Section HYDRADEPHAGA.

Fam. DYTICIDÆ, Leach.

Genus *Hydroporus*, Clairville.

3. *Hydroporus trifasciatus*. Capite fusco-ferrugineo, thorace ferrugineo basi nigra lateribus rotundatis, elytris pallido-ferrugineis, fasciis tribus sutura apiceque nigris, corpore subtus piceo, antennis pedibusque pallidis. Pl. IX. fig. 3.

Corp. long. lin.  $\frac{5}{4}$ . Somewhat linear-oblong, glabrous, thickly and minutely punctured. Under side piceous. Eyes black. Head dusky-ferrugineous. Thorax convex, with the sides rounded, broader than the elytra and slightly widest in front, ferrugineous with the extreme hinder margin black; a short, deep fovea on each side at the base, approximating anteriorly. Elytra depressed, with a sutural stria continuing more than half the length of the suture from the base, and a very deep one on the disc (in continuity with the fovea on the thorax) extending to the middle of the elytron and tending slightly inwards posteriorly,—pale-ferrugineous with the suture and three fasciæ black,—the first being at the base, the second (of a zigzag form, somewhat in the shape of the letter M) a little behind the middle, and the third towards the apex. Legs pale-ferrugineous. Antennæ slightly darker, except the basal joints which are pale.

This most minute and very interesting *Hydroporus* was captured in Ireland by my friend W. Clear, Esq., in the river Lee near Cork, and to him I am indebted for three specimens from which the above description was drawn.